

REMARKS

Claims 33-48 are pending within this application. Claims 1-32 were previously canceled.

Claims 33-36 have been amended merely to clarify that the amount of the carboxylic acid constituent is a percentage of the total amount of the polyolefin resin present within the claimed thermoplastic article. Such a limitation can be seen, as one example, within the preferred embodiments and examples within the originally filed specification. No new matter has been added. Entry and due consideration of such amendments which have been proffered in an earnest attempt to place this application in condition for allowance, are therefore respectfully requested.

The Office has rejected Claims 33-48 under 35 U.S.C. § 103(a) as unpatentable over Lever in view of Koji et al. The Office also rejects the same Claims under the same legal basis over Koji et al. alone. The Office's position for finding the pending claims obvious relies upon Koji et al.'s teaching that polyolefins are present, at least through suggestion, within patentees' disclosure and thus the combination of a styrene-based plastic with polyolefin additives therein and a lubricant, with only calcium stearate listed as a possible type, provides, in the Office's opinion, proper motivation to the ordinarily skilled artisan to introduce a certain amount of calcium stearate within either of Lever's thermoplastics or Koji et al.'s articles.

There are, however, a number of problems with such a position, at least in Applicants' collective opinion. Initially, Applicants cannot find any specific proportions for such a component within Koji et al.'s description, except on page 9 of the supplied translation wherein the amount is either 1% or 2% "of the weight" (presumably of the styrene-based polymer). The Office states that 0.1-10% and more specifically 0.1-5% are actually stated within this reference. However, Applicants cannot locate any such specific ranges of proportions. Thus, Applicants respectfully request the Office to specify on what

page and on what lines such proportions as posited within the current rejections are present within the Koji et al. translation (the citation of column 9, lines 28-39 is not verifiable, something more specific is requested). As it is, the amount of lubricant present is, at the lowest amount found within the translation, well above the 0.08% by weight as listed within the Lever reference. Applicants have clearly showed the importance of introducing from 0.1-1.25% by weight of the polyolefin in terms of permitting the greatest amount of surface-available silver to be exhibited by the claimed thermoplastic article. As this range is between the two distinct amounts of both references (0.8% of Lever and 2% of Koji et al.), at the very least Applicants have shown the unexpected benefits accorded with such a specific range of carboxylic acid salt weights to be utilized for optimum performance within polyolefin resins.

Furthermore, Koji et al. is, again, directed primarily to styrene-based plastics, and more specifically to styrenic rubber formulations which exhibit discoloration when silver-based ion exchange antimicrobials are present therein. The presence of large amounts of lubricant within such styrene-based plastics is the basis of the invention, wherein Lever discusses the importance of adding specific dihydrotalcite compounds to reduce the discoloration effect. If Lever solves the discoloration problem through dihydrotalcite addition, there is no need to add any further amounts of other additives for the same purpose, most specifically because Lever is directed to polyolefins alone, rather than styrene-based rubbers as is Koji et al. There is no reason why the ordinarily skilled artisan would have reviewed Koji et al. to determine the proper amount of carboxylic acid salt to be added was greater than the 0.08% by weight as in Lever and less than the 2.0% by weight as in Koji et al., particularly since the base resins within each reference are different. Lastly, for the same reason, the reliance upon Koji et al. by itself as a proper obviousness-based rejection is misplaced. The claims as currently amended require that the amount of carboxylic acid salt present therein must be a certain percentage of the total amount of

polyolefin constituent. There is no example anywhere within Koji et al. that indicates the amount of polyolefin that can possibly be present, not to mention is definitively present, within the styrene-based thermoplastics. Such polyolefins are only noted as possible components and then only as blends with the styrenes primarily present within Koji et al.'s compositions. Thus, the required amounts of Applicants' carboxylic acid salts are not met by the teachings of Koji et al. since the 2% by weight indicated as the only percentage for Koji et al.'s lubricant component is well above the amount now claimed, and since that claimed amount is reliant upon the amount of polyolefin and not styrene-based resin. Likewise, Koji et al. fails to mention any need to replace the primary styrene-based resin with appreciable amounts of polyolefin specifically in order to meet the claim limitations, let alone to provide proper motivation for the ordinarily skilled artisan to make such a replacement. Additionally, Applicants have, again, clearly shown the importance and unexpected benefits of the claimed ranges of carboxylic acid salts within the antimicrobial polyolefin resins of the claims in terms of surface-available silver generated for more reliable and beneficial antimicrobial results within the ultimate thermoplastic articles made therefrom. Thus, the bases of these rejections are improper. For that reason, it is respectfully requested that reconsideration and withdrawal of such rejections be performed by the Office.

CONCLUSION

In view of all of the amendments and the accompanying remarks above, it is respectfully submitted that the pending claims are now in condition for allowance and it is requested that this application be passed on to issue.

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Respectfully submitted,


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CERTIFICATE OF MAILING

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